S/N 09/313,048

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Serial No .: Dennis A. Carson et al.

09/313,048

Filed: Title:

May 17, 1999

Docket: 103.009US1

Examiner: Ben Schroeder

Group Art Unit: 1611

**PATENT** 

THIAZOLOPYRIMIDINES USEFUL AS TNF ALPHA INHIBITORS

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

In compliance with the duty imposed by 37 C.F.R. § 1.56, and in accordance with 37 C.F.R. §§ 1.97 et. seq., the enclosed materials are brought to the attention of the Examiner for consideration in connection with the above-identified patent application. Applicants respectfully request that this Information Disclosure Statement be entered and the documents listed on the attached Form 1449 be considered by the Examiner and made of record.

Applicants are submitting herewith European Patent No.'s 0 188 150 and 0 348 746 as well as German Patent No. 2038922 with English-language abstracts. Applicants submit that the English-language abstracts attached to the front of the foreign patents are a concise explanation of the relevance of EP 0 188 150, EP 0 348 746 and DE 2038922 as they are presently understood and as required under 37 C.F.R. § 1.98(a)(3). Accordingly, the Examiner is respectfully requested to acknowledge consideration of the foreign patents. For the Examiner's convenience, EP 0 188 150, EP 0 348 746 and DE 2038922 have been listed on the enclosed Form 1449, and duplicate copies of the foreign patents and their English-language abstracts are enclosed herewith.

Pursuant to the provisions of MPEP 609, Applicants further request that a copy of the 1449 form, initialed by the Examiner to indicate that all listed citations have been considered, be returned with the next official communication.

Applicants have included the fee of \$240.00 under 37 C.F.R. §§ 1.97(c) and 1.17(p). Please charge any additional fees or credit any overpayment to Account No. 19-0743.

The Examiner is invited to contact the Applicants' Representative at the below-listed telephone number if there are any questions regarding this communication.

Respectfully submitted,

DENNIS A. CARSON ET AL.

By their Representatives,

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SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.

P.O. Box 2938

Minneapolis, MN 55402

(612) 373-6903

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Warren D. Woessner, Ph.D.

Reg. No. 30,440 WDW:agd

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner of Patents, Washington, D.C. 20231 on December 1999.

Signature

Sheet 1 of 3

Form 1449\*

TRADEMENT

INFORMATION DISCLOSURE STATEMENT
BY APPLICANT
(Use several sheets if necessary)

Atty. Docket No.: 103.009US1

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Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate	
	<del>\</del>						
				0.00	0.5.3	10/24/60	
	_ 3,584,378	07/20/1971	Laliberte et al.	260	251	10/24/69	
	_ 3,913,201	11/11/1975	Evans	260	240 J	10/29/73	
	_ 4,041,167	08/09/1977	Moser et al.	242	279	01/19/76	
	_ 4,103,0 <b>1</b> 6	07/25/1978	Moser et al.	424	270	12/22/76	
	_ 4,110,451	08/29/1978	Moser et al.	424	251	12/29/76	
	_ 4,111,693	09/05/1978	Wright et al.	96	1.6	12/22/76	
	_ 4,160,768	07/10/1979	Moser et al.	260	306.7 T	03/02/78	
	_ 4,175,961	11/27/1979	Wright et al.	430	58	04/03/78	
	_ 4,224,334	09/23/1980	Moser et al.	424	270	04/02/79	
	_ 4,593,095	06 03/1986	Snyder et al.	544	272	02/18/83	
	_ 4,769,377	09/06/1988	Snyder et al.	514	263	02/03/86	
	_ 4,996,208	02/26/1991	Lindner et al.	514	258	06/19/89	
	_ 5,521,181	05/28/1996	Meyer et al.	514	249	01/27/95	
	_ 5,521,101	02/04/1997	Matsumoto et al.	514	232.5	04/01/94	
	_ 5,792,767	08/11/1998	Meyer et al.	514	249	06/05/95	
	_ 3,732,707	00/11/1000					
		FC	RETGN PATENT DOCUMENT	rs			
xaminer Initial	Document Number	Date	Country	Class	Subclass	Translation Yes   No	
	_ 0188150	07/23/1986	European	C07D	513/04	413330	
	0348746	01/03/1990	European	C07D	513/04	the same	
	_ 0733633	09/25/1996	European	C07D	487/04	I he Jame	
	0849256	06/24/1998	European	C07C	235/60	IDS (bod	
	_ 2038922	03/04/1971	Germany	C07D	091/42	7 4	
	_ 93/06090	04/01/1993	PCT	C07D	239/541	OII DE	
		, ,		t/\ 1	12 F-14	DA BZ	
	•		OTHER DOCUMENTS	F1 L		SCORA 718	
Examiner		(Including	Author, Title, Date, Pertinent Page	ges, Etc.)	12UD	DEKEN ,	
Initial							
	Abdel-Fattah, A.M., et al., "Reactions with 6-Methyl-2-Thiouracil Synthesis of Dipyrimidino 2.1-b:1',2'-c Thiazine. A New Ring System", Phosphorus,						
				<b>\</b>	tem", Pho	spnorus,	
	Sulfur an	d Silicon, 72,	pp. 145-156, (1992	2)			

Examiner Date Considered

(1995)

in Human Fibroblasts", Biochemical Pharmacology, 30,

Basyouni, W.M., et al., "Synthesis and Molluscicidal Properties of Some Newer Thiazoles and Their Thiazolo [5,4,-d] Pyrimidinone Derivatives", Egypt. J.

"Adenosine Antagonism by Purines, Pteridines and Benzopteridines

25-333,

(1981)

pp. 91-102,

Bilh., 17,

MART 2 3 2003 6 3

Sheet 2 of 3

Form 1449\*

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Group: 1611

\*\*Examiner Initial

## OTHER DOCUMENTS

(Including Author, Title, Date, Pertinent Pages, Etc.)

Flammang, R., et al., "Iminoethenethiones, RN==C==C==S: Characterization by Neutral vation-Reionization Mass Spectrometry and G2(MP2) Theory", Journal of the American Chemical Society, 116 (5), pp. 2005-2013, (1994) Furrer,  $H. \lambda$  et al., "A new class of potent hypolipemic agents raising high-density lipoproteins. Synthesis, reactions and pharmacological properties", Eur. J. Med. Chem., 29, pp. 819-829, (1994) "Study on the Formation of Thiazolopyrimidinediones et al., Ghoneim, K.M., and Pyrimidothia inediones from 6-Methyl-2-thiouracil", Polich. J. Chem., 72, (1997) pp. 1173-1177, "Alkylation Studies on 6-Ethyl-2,3-dihydrothiazolo-Glennon, R.A., et al., [3,2- $\alpha$ ] pyrimidine-5, \(\frac{1}{2}\)-diones", Journal of Heterocyclic Chemistry, 16 (5), pp. (July 1979) 903-907, "A Novel Thiazole Synthesis. Goldman, I.M., 4,5,6,7-Tetrahydrothiazo $\sqrt[3]{4}$ ,5- $\sqrt[3]{9}$ yrimidine-5,7-diones", The Journal of Organic Chemisrty, 34 (11), pp. 3285-3289, (Nov. 1969) "Cycloac lierung von Enaminen, I Synthese von Grohe, K., et al., 2-Thiazolon-Derivaten", Liebigs Ann. Chem., pp. 1018-1024, "Synthesis of Some Tricyclic Heterocycles from Itoh, T., et al., 5,6-Diamino-1,3-dimethyluracil", them. Pharm. Bull., 37 (8), pp. 2197-2199, (August 1989) "2-14C-1-Allyl-3,5-diethyl-6-chlorouracil II: Isolation Kaul, R., et al., and Structures of the Major Sulfur-Free and Three Minor Sulfur-Containing Metabolites and Mechanism of Biotransformation", Journal of Pharmaceutical (Aug. 1988) pp. 897-900, Sciences, 71 (8), Kaul, R., et al., "Mechanism of Formation of SCH3-Metabolites Investigated on the Biotransformation of 1-Ally1-3,5-Diethyl-6 Chlorouracil in Rabbits", Chemopshere, 10 (8), pp. 929-934, "Characterization of Immunomedulating Action of TI-31 Komoriya, K., et al., pp. 443-447, (1991)on Antibody Response in Mice", J. Pharmacobio-Dyn.

> ALREADY LOWSIDERED SAME AS

Examiner

Date Considered

— IPS (paper #1T)

\*Substitute Disclosure Statement Form (PTO-1449)

\*\*EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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m 1449*	Atty. Docket No.: 103.009US1	Serial 140. 09/313,048				
FORMATION DISCLOSURE STATEMENT	Applicant: Dennis A. Carson et al.					
BY APPLICANT (Use several sheets if necessary)	Filing Date: May 17, 1999	Group: 1611				
**Examiner (Including	OTHER DOCUMENTS Author, Title, Date, Pertinent Pages, Etc.)					
Anti-Human Cytomegaloviru Derivatives", J. Heterocy Mbagwu, G.O., et al., "C Mesoionic Xanthine Analog	niazolo[4,5-d]pyrimidines. Pus (HCMV) Activity in vitro vclic Chem., 32, pp. 547-55 Carbon-13 Nuclear Magnetic F gs", Organic Magnetic Resona	of Certain Alkyl 66, (Mar-Apr. 1995) Resonance Spectra of Some				
Mbagwu, G.O., et al, "S	(1983)  Mbagwu, G.O., et al, "Studies of Amine-Induced Ring Opening of Some Mesoionic Xanthines" J. Heterocyclic Chem., 22, pp. 465-474, (1985)					
$4 - (\beta_{-D} - Ribofuranosyl) - \lambda$	nthesis of a Potential Antit 5,6,7-tetrahydrothiazolo4, nosine)", <u>Chem. Pharm. Bull</u>	5- <i>d</i> pyrimidine-5,7-dione				
of Certain 3- $\beta$ -p-Ribofura	Thia2olo[4,5-d]pyrimidine Nuc anosylthia2olo[4,5-d]pyrimidi ", J. Mad. Chem., 33, pp. 4	nes as Potential				
Sen, D., et al., "Effect Development in Mice", J.	of Mesolonic Xanthine Ana Euk. Micropiol., 40 (3),	logs on <i>Trypanoso</i> ma muscul pp. 259-262, (1993)				
Sudhakar Rao, T., et al. $4,6$ -Disubstituted- $7$ - $\beta$ -D-Arabinofuranosylpyrazology. Heterocyclic Chem., 2	ribofuranosyl-and 3,4-dpyrimidines and Cetair	n Related Ribonucleosides",				
Szajda, M., et al., "Re Acid", Polish Journal of	Szajda, M., et al., "Reactions of 2-Thiothymine with Esters of Chloroacetic Acid", Polish Journal of Chemistry, 52, pp. 1027-1031, (1983)					
Takahashi, H., et al., Glycosylaminoisothiazolo Chem. Pharm. Bull., 27 (	[3,4-d] pyrimidines and Glyco	\				
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